

Serial No.: 09/550,391

AMENDMENTS IN THE CLAIMS:

1. (Previously Presented) An image processor comprising:
dot-area extraction means for extracting a dot area in an image based on image data of a subject image; and
moire-removing spatial filter means for performing a process of limiting spatial frequency components of the extracted dot area to an image data portion corresponding to the dot area,
wherein the moire-removing spatial filter means has a characteristic of attenuating an entirety of the spatial frequency components to be contained in the image and further attenuating or removing a predetermined spatial frequency component of the extracted dot area liable to cause moire appearance.

2. (Previously Presented) An image processor comprising:
dot-area extraction means for extracting a dot area in an image based on image data of a subject image; and
moire-removing spatial filter means for performing a process of limiting spatial frequency components of the extracted dot area to an image data portion corresponding to the dot area,
wherein the moire-removing spatial filter means has a characteristic of attenuating an entirety of the spatial frequency components to be contained in the image and further attenuating or removing a predetermined spatial frequency component liable to cause moire appearance, and
wherein the characteristic of the moire-removing spatial filter means is defined by a matrix given by a convolution operation of a matrix defining a characteristic of a first filter for attenuating or removing the moire a causative spatial frequency component and a matrix defining a smoothing filter characteristic, and the smoothing filter characteristic is to smooth the entirety of the spatial frequency components to be contained in the image.

Serial No.: 09/550,391

3. (Original) The image processor of claim 2, wherein the first filter is a band-cut filter, a spatial frequency characteristic of which presents a minimum value at the moire-causative spatial frequency.

4. (Original) The image processor of claim 2, wherein all filter coefficients of the matrix defining the smoothing filter characteristic are of an equal value.

5. (Original) The image processor of claim 2, wherein out of all the filter coefficients of the matrix defining the smoothing filter characteristic, a central coefficient of the matrix has a greater value than the other coefficients.

6. (Original) The image processor of claim 2, wherein in the case where a plurality of the moire-causative spatial frequencies are previously determined, the matrix defining the first filter characteristic is given a cross convolution operation of matrices respectively defining characteristics of respective filters for attenuating or removing the respective moire-causative spatial frequency components.

7. (Original) The image processor of claim 1, wherein in the case where the image is composed of pixels and image data thereof is composed of luminance data and color difference data on each of the pixels, the moire-removing spatial filter means processes only the luminance data on each pixel.

8-13 (Canceled)

14. (Previously Presented) An image processor, comprising:
dot area extraction means for extracting a dot area in an image based on image data of a subject image; and
moire-removing spatial filter means for performing a process of limiting spatial frequency components of the extracted dot area to an image data portion corresponding to the dot area,

Serial No.: 09/550,391

wherein the moire-removing spatial filter means has a characteristic of attenuating an entirety of the spatial frequency components to be contained in the image and further concurrently attenuating or removing a predetermined spatial frequency component liable to cause moire appearance.

15. (Previously Presented) The image processor of claim 14, wherein in the case where the image is composed of pixels and image data thereof is composed of luminance data and color difference data on each of the pixels, the moire-removing spatial filter means processes only the luminance data on each pixel.

16. (New) An image processor comprising:

dot-area extraction means for extracting a dot area in an image based on image data of a subject image; and

moire-removing spatial filter means for performing a process of limiting spatial frequency components of the extracted dot area to an image data portion corresponding to the dot area,

wherein the moire-removing spatial filter means has a characteristic defined by a third matrix given by a convolution operation of a first matrix and a second matrix,

and wherein the first matrix is defined by a matrix given by a convolution operation of a plurality of band-cut filter matrices with each other, each band-cut filter matrix defines a characteristic of a band-cut filter having a minimum value at each predetermined spatial frequency liable to cause moire appearance,

the second matrix defines a smoothing filter characteristic to attenuate and smooth the entirety of the spatial frequency to be contained in the image, and

all filter coefficients of the matrix defining the smoothing filter characteristic are of an equal value.

17. (New) An image processor comprising:

dot-area extraction means for extracting a dot area in an image based on image data of a subject image; and

Serial No.: 09/550,391

moire-removing spatial filter means for performing a process of limiting spatial frequency components of the extracted dot area to an image data portion corresponding to the dot area,

wherein the moire-removing spatial filter means has a characteristic defined by a third matrix given by a convolution operation of a first matrix and a second matrix,

and wherein the first matrix is defined by a matrix given by a convolution operation of a plurality of band-cut filter matrices with each other, each band-cut filter matrix defines a characteristic of a band-cut filter having a minimum value at each predetermined spatial frequency liable to cause moire appearance,

the second matrix defines a smoothing filter characteristic to attenuate and smooth the entirety of the spatial frequency to be contained in the image, and

out of all the filter coefficients of the matrix defining the smoothing filter characteristic, a central coefficient of the matrix has a greater value than the other coefficients.